UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/729,523	12/04/2000	Kinney Bacon	A-6237	4555

5642 7590 10/27/2005		

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EXAMINER
SHERKAT, AREZOO

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/729,523	BACON ET AL.
	Examiner	Art Unit	
	Arezoo Sherkat	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>09 August 2005</u>.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-4,9-20,23,24 and 28-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-4,9-20,23,24 and 28-30* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Response to Amendment

This office action is responsive to Applicant's amendment received on August 9th,
2005. Claims 1-4, 9-20, 23-24, and 28-30 are pending.

Response to Arguments

Applicant's arguments filed August 9th, 2005 have been fully considered but they
are not persuasive.

Applicant argues that Hylton fails to disclose "assigning to the source of at least
one packetized data stream, a first unique identifier and transmitting the first unique
designator in conjunction with the multiplexed signal, wherein the first unique designator
indicates the source of the at least one packetized data stream."

Examiner responds that Hylton expressly discloses, "under the MPEG II
standard, incoming individual digitized and compressed video and related audio signals
are packetized into respective Video and Audio Packetized Elementary Streams (PES).
The video and audio PES's from **a plurality of sources** may be combined with similarly
packetized data into a transport stream for transmission (Col. 10, lines 54-60). Hylton
also discloses, "each 188 byte transport stream packet consists of two or three sections,
a 4 byte packet header section, a payload section and/or an optional adaptation field.
The header information includes, inter alia, a synchronization byte, a variety of different
flags used in reconstruction of the frames, and a thirteen-bit program identification (PID)
number. PID value 0 is reserved as an indication that the packet includes program
association table data (mapping program numbers (PNs) for individual programs into

PID values for program maps for those programs). PID value 1 is reserved for identification of packets containing conditional access data, such as encryption information. **Other program identification numbers are utilized to identify transport packets with the program source from which they originate** and the type of program information contained therein" (Col. 11, lines 24-39).

Examiner respectfully maintains the rejection formulated on April 27th, 2005 as follows:

Regarding claim 1, Hylton discloses in a system with a plurality of packetized data streams, a method of designating a source of at least one packetized data stream within a multiplexed signal including at least a portion of the at least one packetized data stream, the method comprising the steps of:

assigning to the source of the at least one packetized data stream, a first unique designator (Col. 10, lines 22-67 and Col. 11, lines 1-40);

multiplexing at least the portion of the at least one packetized data stream with at least a portion of a second packetized data stream to create the multiplexed signal (Col. 24, lines 38-67 and Col. 25, lines 1-67); and

transmitting the first unique designator in conjunction with the multiplexed signal, wherein the first unique designator indicates the source of the at least one packetized data stream (i.e., for digital services, the connection block descriptor also includes either a program number or at least one MPEG II PID value needed to identify the program within the digital stream on that RF channel)(Col. 10, lines 22-67 and Col. 11, lines 1-40).

Regarding claim 9, Hylton discloses in a host terminal, a method of multiplexing

together packets from at least two packetized data streams to enable decryption of the

packets by an external conditional access module, the method comprising the steps of:

assigning to each of the sources originating the at least two packetized data

streams, associated unique designators (Col. 10, lines 22-67 and Col. 11, lines 1-40);

multiplexing the packets forming portions of the at least two packetized data

streams into a signal, creating an association for each packet in the signal with the

unique designator of the originating packetized data stream from which each packet

originated (i.e., for digital services, the connection block descriptor also includes either a

program number or at least one MPEG II PID value needed to identify the program

within the digital stream on that RF channel)(Col. 29, lines 39-67 and Col. 30, lines 1-

35);

transmitting the signal and the associations of the packets to the external

conditional access module, and decrypting, in the external conditional access module,

the packets in the signal based on the associated unique designators (Col. 26, lines 1-

63).

Regarding claim 11, Hylton discloses in a system with a plurality of Moving

Picture Experts Group type 2 (MPEG-2) standard transport streams and a host terminal,

a method of designating to an external conditional access module a source of at least

one packet of a first MPEG-2 transport stream with a multiplexed signal including the at

least one packet of the first MPEG-2 transport stream, the method comprising the steps

of:

assigning to the source of the first MPEG-2 transport stream, a unique designator

(Col. 10, lines 22-67 and Col. 11, lines 1-40);

creating a transport stream source indicator signal that includes the unique

designator associated with the at least one packet of the first MPEG-2 transport stream,

multiplexing the at least one packet of the first MPEG-2 transport stream with packets

from at least a portion of a second MPEG-2 transport stream to create the multiplexed

signal (Col. 11, lines 5-67 and Col. 12, lines 1-63); and

transmitting to the external conditional access module the transport stream

source indicator signal in conjunction with the multiplexed signal, wherein transmission

of the transport stream source indicator signal, by the unique designator, indicates the

source of the at least one packet as the source of the first MPEG-2 transport stream

(Col. 10, lines 22-67 and Col. 11, lines 1-40).

Regarding claim 14, Hylton discloses an external conditional access module

comprising:

a host terminal interface configured to receive from a host terminal, an incoming

multiplexed signal comprising at least one packetized data stream that includes a

unique source address that indicates a source of a data packet inside the at least one

packetized data stream (Col. 18, lines 23-67 and Col. 19-20, lines 1-67);

a de-multiplexer configured for de-multiplexing the incoming multiplexed signal

into data packets associated with the at least one packetized data stream based on the

Imique source address associated with each data packet (Col. 30, lines 4-67 and Col.

31, lines 1-15);

a controller configured for determining if decryption is allowed for the data

packets associated with the least one packetized data stream and for controlling

decryption parameters, and a decryptor configured for decrypting, if decryption is

allowed, the data packets associated with the at least one packetized data stream using

decryption parameters for the at least one packetized data stream (Col. 25, lines 65-67

and Col. 26, lines 40-67).

Regarding claim 18, Hylton discloses a host terminal that provides a multiplexed

signal to an external conditional access module, wherein the multiplexed signal includes

data packets from at least two packetized data streams, the host terminal comprising:

at least two tuners, each tuner for receiving one of the at least two packetized

data streams (Col. 18, lines 23-67); and

a multiplexer for combining data packets from the at least two packetized data

streams into the multiplexed signal, for assigning a unique source address that indicates

which tuner received the packetized data stream associated with the data packets, for

transmitting the multiplexed signal to the external conditional access module, and for

communicating the unique source address associated with each data packet to the

external conditional access module (Col. 12, lines 4-63).

Regarding claims 2, 10, 15, and 19, Hylton discloses wherein the packetized

data stream is in a format compliant with at least one of Moving Picture Experts Group

type 2 (MPEG-2) standard, Moving Picture Experts Group type 4 (MPEG-4) standard,

Asynchronous Transfer Modulation (ATM) standard, and Internet Protocol (IP) standard

(Col. 10, lines 22-60).

Regarding claims 3 and 4, Hylton discloses wherein the step of transmitting the

first unique designator comprises the steps of:

creating a first unique designator signal that includes the first unique designator

(Col. 11, lines 5-67 and Col. 12, lines 1-63); and

transmitting the first unique designator signal in conjunction with the multiplexed

signal, wherein the first unique designator signal provides the first unique designator at

the start of the at least one packet of the at least one packetized data stream (Col. 19,

lines 1-67 and Col. 20, lines 1-36).

Regarding claim 12, Hylton discloses further including the step of decrypting, in

the external conditional access module, the at least one packet based on the source of

the first MPEG-2 transport stream (Col. 25, lines 65-67 and Col. 26, lines 40-67).

Regarding claim 13, Hylton discloses further including the step of transmitting the

decrypted at least one packet from the external conditional access module to the host

terminal (Col. 26, lines 63-67 and Col. 27, lines 1-15).

Regarding claim 16, Hylton discloses further comprising an encryptor for

encrypting the data packets associated with the at least one packetized data stream

(Col. 25, lines 60-67 and Col. 26, lines 1-40).

Regarding claim 17, Hylton discloses wherein the encryption provides copy

protection for the data packets associated with the at least one packetized data stream

(Col. 26, lines 40-67 and Col. 27, lines1-15).

Regarding claim 20, Hylton discloses further comprising a demultiplexer for

receiving an output signal from the external conditional access module, for de-

multiplexing the output signal, and for providing the at least two packetized data

streams as separate packetized data streams (Col. 30, lines 4-67 and Col. 31, lines 1-

15);

Regarding claim 22, Hylton discloses wherein the at least one packetized data

stream comprises a first encrypted signal, and wherein the source of the at least one

packetized data stream comprises a first tuner (Col. 18, lines 23-67).

Regarding claim 23, Hylton discloses further comprising decrypting the first

encrypted signal subject to a first authorization (Col. 25, lines 65-67 and Col. 26, lines

40-67).

Regarding claims 28-29, Hylton discloses a point-of-deployment (POD) module

comprising:

a host terminal interface configured to receive from a host terminal, a multiplexed

signal comprising a first encrypted signal together with a first transport stream source

indicator signal (TSSIS) (Col. 18, lines 23-67 and Col. 19-20, lines 1-67);

a demultiplexer configured to use the first TSSIS to identify the first encrypted

signal in the multiplexed signal packet (Col. 30, lines 4-67 and Col. 31, lines 1-15);

a controller configured to generate a first decryption instruction upon receiving

authorization through a first authorization grant signal, and a first decryptor configured

to receive from the demultiplexer, the first encrypted signal, and decrypt the first

encrypted signal conditional to receiving the first decryption instruction (Col. 25, lines

65-67 and Col. 26, lines 40-67).

Regarding claim 30, Hylton discloses further comprising:

assigning to a second tuner that is a source of the second packetized data

stream, a second unique designator (Col. 10, lines 22-67 and Col. 11, lines 1-40); and

transmitting the second unique designator in conjunction with the multiplexed

signal, whereby the second unique designator provides an identification of the second

tuner ms the source of the second packetized data stream (Col. 19, lines 1-67 and Col.

20, lines 1-36).

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Wasilewski, (U.S. Patent No. 5,420,866).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-

3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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Patent Examiner
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Oct. 21, 2005

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